Commonwealth of Kentucky

Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name:	**Ahlstrom Engine Filtration, LLC**
Mailing Address:	**215 Nebo Rd.** **P.O. Box 1708** **Madisonville, KY 42431**
Source Name:	**Same as above.**
Mailing Address:	**Same as above.**
Source Location:	**215 Nebo Rd.** **Madisonville, KY 42431**
Permit Number:	**V-04-021**
Log Number:	**51224, 54573**
Review Type:	**Title V, Operating**
Source ID #:	**21-107-00028**
Regional Office:	**Owensboro Regional Office** **3032 Alvery Park Drive W., Suite 700** **Owensboro, KY 42303-2191** **(270) 687-7304**
County:	**Hopkins**
Application Complete Date:	**February 18, 2000**
Issuance Date:	
Revision Date:	
Expiration Date:	

John S. Lyons, Director
Division for Air Quality

Revised 12/09/02

TABLE OF CONTENTS

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (--) Paper Coating Operations

Description: Paper Coating Operations include the following processes/equipment:

1. Resin Kitchen
   - Alcohol-Resin mixing
2. Saturator
   - Continuous Roll Coater
   - Maximum continuous rating: 2.14 tons coating/hr
3. Saturator Wind-up Station (Fugitive Emissions)
4. Mull Rack (Fugitive Emissions)
   - Maximum continuous rating: 3.9 tons coated paper/hr
5. Unwind Station (Fugitive Emissions)
6. Pre-Dryer
   - Primary Fuel: Natural Gas. Secondary Fuel: None.
   - Rating: 2.5 mmBtu/hr
7. Cure Oven
   - Primary Fuel: Natural Gas. Secondary Fuel: None.
   - Rating: 2.5 mmBtu/hr

Installed: 1974 (Based on mill start-up date)

Control Equipment Description:

Type: Thermal Oxidizer
Model: E-45000
Manufacturer: Reeco
Primary Fuel: Natural Gas. Secondary Fuel: None.
Rated capacity: 30 mmBtu/hr (two 15 mmBtu/hr Max Burners)
Date constructed: 1989

APPLICABLE REGULATIONS:

401 KAR 61:120, Existing *Fabric, vinyl and paper surface coating operations,* applies to the Paper Coating Operations.

401 KAR 63:020, *Potentially hazardous matter or toxic substances,* applies to the Paper Coating Operations.

401 KAR 63:021, *Existing sources emitting toxic air pollutants,* applies to the Paper Coating Operations.

40 CFR 63, Subpart JJJJ, *NESHAP for Paper and Other Web Coating*, applies to the emissions from the Saturator, Mull Rack, Pre-Dryer, and Cure Oven.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (--) **Paper Coating Operations** (Continued)

NON-APPLICABLE REGULATIONS:
401 KAR 59:210, *New fabric, vinyl and paper surface coating operations*, does not apply to the Paper Coating Operations because the facility was constructed prior to the effective date of this regulation.

40 CFR 63 Subpart S, *NESHAPs from the Pulp and Paper Industry*, does not apply to this facility because there is no bleaching or mechanical pulping process.

40 CFR 63 Subpart MM, *NESHAPs from the Pulp and Paper Industry*, does not apply to this facility because the source does not produce pulp.

1. Operating Limitations:

a. The permittee shall provide the utmost care and consideration, in the handling of hazardous matter or toxic substances, to the potentially harmful effects of the emissions resulting from such activities. [401 KAR 63:020, Section 3]

b. The average combustion temperature of the Reeco Thermal Oxidizer in any three-(3) hour period must not fall below 1500°F, or the combustion temperature limit established during the most recent performance test. [See **Testing Requirement 3.b.** and **3.c.**, below]

c. Emissions from the Saturator, Pre-Dryer, and Cure Oven shall be captured and routed to the Reeco Thermal Oxidizer at all times they are in operation. [401 KAR 63:021 and Permit O-88-066] If required to meet **Emission Limitation 2.a.**, emissions from the Resin Kitchen, Saturator Wind-up Station, Mull Rack, and/or Unwind Station shall be captured and routed to the Reeco Thermal Oxidizer at all times they are in operation.

d. The average gas volumetric flow rate or duct static pressure established during the most recent performance test shall be the minimum operating limit for the specific capture device. [See **Testing Requirement 3.d.** and **e.**, below]

e. Based on the Reasonably Available Control Technology (RACT) determination from Permit O-88-066, the destruction efficiency of the Reeco Thermal Oxidizer for Formaldehyde shall be at least 91.5%. [401 KAR 63:021 and Permit O-88-066]

f. Additional or revised operating limitations pursuant to 40 CFR 63, Subpart JJJJ to be determined based upon initial notification requirements. See **Compliance Schedule 9.a.** and **b.**, below.

Compliance Demonstration Method

a. The permittee shall install, calibrate, and maintain a temperature measurement device according to the manufacturer's specifications for monitoring the combustion temperature of the Reeco Thermal Oxidizer. The device shall have an accuracy of the greater of 0.75% of the temperature being measured expressed in °C (or °F) or +/- 2.5 °C (or Fahrenheit equivalent). The temperature measurement device shall be equipped with a recording device so that a permanent record is produced.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (--) **Paper Coating Operations** (Continued)

b. See **Testing, Monitoring, Recordkeeping**, and **Reporting Requirements**, below.

2. Emission Limitations:

a. No person shall cause, allow, or permit an affected facility to discharge into the atmosphere more than fifteen (15) percent by weight of the VOC's net input into the affected facility. [401 KAR 61:120, Section 3]

b. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

c. Additional or revised emission limitations pursuant to 40 CFR 63, Subpart JJJJ to be determined based upon initial notification requirements. See **Compliance Schedule 9.a.** and **b.**, below.

Compliance Demonstration Method

a. Compliance with the standard for VOC's shall be demonstrated by the following material balance equation and comparison. [401 KAR 61:120, Section 4(2)]

$$\text{VOC's Emitted} = VOC_{N.I.} - [((VOC_{R.K.} * CE_{R.K.}) + (VOC_{SATURATOR} * CE_{SATURATOR}) + (VOC_{OVENS} * CE_{OVENS})) * DE_{T.O.}]$$

Where, $VOC_{N.I.}$ = VOC's net input as defined by 401 KAR 61:120, Section 1(13)
$VOC_{R.K.}$ = VOC's emitted from the Resin Kitchen
$CE_{R.K.}$ = Capture efficiency of the Resin Kitchen emission capture device
$VOC_{SATURATOR}$ = VOC's emitted from the Saturator
$CE_{SATURATOR}$ = Capture efficiency of the Saturator emission capture device
VOC_{OVENS} = VOC's emitted from the Pre-Dryer and Cure Oven
CE_{OVENS} = Capture efficiency of the Pre-Dryer and Cure oven emission capture device
$DE_{T.O.}$ = VOC destruction efficiency of the Reeco Thermal Oxidizer

$$\text{VOC's Emitted} < \text{or} = (VOC_{N.I.} * 0.15)$$

b. Compliance with the VOC emission limit shall be based on an averaging period not to exceed twenty-four (24) hours. [401 KAR 61:120, Section 4(5)]

c. Hazardous matter and toxic substance compliance will be determined by the **Testing Requirements**, below.

3. Testing Requirements:

a. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the Cabinet. [401 KAR 63:020, Section 3]

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (--) **Paper Coating Operations** (Continued)

b. Within 60 days of issuance of the proposed permit, the permittee shall conduct a Method 25 or 25A performance test, as applicable, outlined in Appendix A to 40 CFR Part 60 to verify the overall reduction efficiency of VOC's. Additionally, within 60 days of issuance of the proposed permit, the permittee shall conduct an NCASI Method CI/WP-98.01, "Chilled Impinger Method for use at Wood Products Mills to Measure Formaldehyde, Methanol, and Phenol," performance test to verify the overall reduction efficiency of formaldehyde. This testing requirement is also applicable to reconstruction or modification of any component of the Reeco Thermal Oxidizer or any component venting to the Reeco Thermal Oxidizer that may affect the reduction efficiency of VOC's and potentially hazardous matter or toxic substances. [401 KAR 50:045 Section 1]

c. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature of the Reeco Thermal Oxidizer. This combustion temperature shall be the minimum operating temperature of the Reeco Thermal Oxidizer. [See **Operating Limitation 1.b.**, above]

d. Pursuant to 401 KAR 50:045 Section 1, within 60 days of issuance of the proposed permit, the permittee shall determine the capture efficiency for each separate capture device in the emission capture system utilizing the most applicable procedure outlined in Method 204, or 204A through F of Appendix M to 40 CFR Part 51.

e. The permittee shall calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average volumetric flow rate or duct static pressure is the minimum operating limit for the specific capture device. [See **Operating Limitation 1.d.**, above]

f. Pursuant to Section VII.1.(2) of the "Policy Manual of the Division of Air Pollution Control" incorporated by reference in 401 KAR 50:016, Section 1(1), when demonstration of compliance, through performance test, is made at a production rate less than the maximum specified in the application form, the permit shall be conditioned to limit the production rate to no more than 110% of the average test rate.

g. Using emission rates developed from testing, the permittee shall submit Industrial Source Complex (ISC3) modeling as described in Appendix A to Appendix W to 40 CFR Part 51, and an analysis of all affected facilities that emit Formaldehyde, Methanol, Phenol, and Triethylamine as to the adequacy of controls and/or procedures and emission potential for evaluation by the Division within 30 days of the test results submittal required by **Specific Reporting Requirement 6.c.** and section **F.11.** of this permit.

h. At least three months before the expiration date of this permit, the permittee shall conduct a performance test on the Reeco Thermal Oxidizer control system. This requirement shall be waived by the Division if a performance test has been performed within the previous two years.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (--) **Paper Coating Operations** (Continued)

i. Additional or revised testing requirements pursuant to 40 CFR 63, Subpart JJJJ to be determined based upon initial notification requirements. See **Compliance Schedule 9.a.** and **b.**, below.

4. Specific Monitoring Requirements:

a. The Specific Recordkeeping Requirements listed below dictate the monitoring requirements.

b. Additional or revised requirements to be determined based upon initial notification requirements of 40 CFR 63, Subpart JJJJ. See **Compliance Schedule 9.a.** and **b.**, below.

5. Specific Recordkeeping Requirements:

For the coating process:

Daily records shall be maintained by the source, made available to the Cabinet or the U.S. EPA upon request, and shall contain the following: [401 KAR 61:120, Section 4(8)(a) – (f)]

a. Daily records of Applicable Regulation numbers shall be maintained by the source.

b. The permittee shall maintain daily records of application method and substrate type.

c. The permittee shall maintain daily records of amount and type of adhesive, coating (including catalyst and reducer for multicomponent coatings), or solvent used at each point of application, including exempt compounds.

d. The permittee shall maintain daily records of VOC and potentially hazardous matter or toxic content as applied in each adhesive, coating, or solvent.

e. The permittee shall maintain daily records of the date for each application of coating or solvent.

f. The permittee shall maintain daily records of the amount of surface preparation, clean up, or wash-up solvent (including exempt compounds) used and the VOC content of each.

For the control device and emission capture system:

g. Calculate and record the weight percentage of VOC's emitted each day. [401 KAR 61:120, Section 4(5)]

h. For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

i. The permittee shall maintain the records required to show continuous compliance with the emission limits including continuous permanent records of the Reeco Thermal Oxidizer combustion chamber temperature and gas volumetric flow rate or duct static pressure for each separate capture device in the system.

j. The permittee shall maintain records of each add-on-control device performance test including, but not limited to:

01 (--) **Paper Coating Operations** (Continued)

(1) Records of the coating operation conditions during the add-on-control device performance test showing that the performance test was conducted under representative conditions.

(2) During the performance test, the permittee must record the combustion temperature at least once every fifteen- (15) minutes during each of the three test runs to satisfy continuous monitoring requirements.

(3) During the capture efficiency determination, the permittee shall record either the gas volumetric flow rate or the duct static pressure for each separate capture device in the system at least once every fifteen (15) minutes during each of the three test runs at a point in the duct between the capture device and the add-on-control device inlet.

k. For each capture system that is a Permanent Total Enclosure (PTE), the permittee shall record the data and documentation used to support that the capture system meets
the criteria in Method 204 of Appendix M to 40 CFR Part 51 for a PTE and has a capture efficiency of 100 percent.

l. For each capture system that is not a PTE, the permittee shall maintain the data and documentation used to determine capture efficiency.

m. Additional or revised requirements to be determined based upon initial notification requirements of 40 CFR 63, Subpart JJJJ. See **Compliance Schedule 9.a.** and **b.**, below.

6. Specific Reporting Requirements:

a. Pursuant to Section VII 2.(1) of the "Policy Manual of the Division of Air Pollution Control" incorporated by reference in 401 KAR 50:016, Section 1.(1), at least one month prior to the date of required performance tests, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office.

b. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

c. The average combustion temperature of the Reeco Thermal Oxidizer, the average gas volumetric flow rate or duct static pressure for each capture device, and the capture efficiency for each separate capture device established during the most recent performance test shall be reported as specified in section **F.11.** of this permit.

d. Report any exceedances of **Operating Limitation 1.b.** and **Emission Limitation 2.a.** recorded during operation for semiannual reporting periods.

e. If there is a deviation from an emission limitation (including any periods when emissions bypassed the add-on-control device and were diverted to the atmosphere), the permittee shall submit a report as specified in section **F.8.** of this permit.

f. Additional or revised requirements to be determined based upon initial notification requirements of 40 CFR 63, Subpart JJJJ. See **Compliance Schedule 9.a.** and **b.**, below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (--) **Paper Coating Operations** (Continued)

7. **Specific Control Equipment Operating Conditions:**

a. See previous sections.

b. Additional or revised requirements to be determined based upon initial notification requirements of 40 CFR 63, Subpart JJJJ. See **Compliance Schedule 9.a.** and **b.**, below.

8. **Alternate Operating Scenarios:** None.

9. **Compliance Schedule:**

a. The permittee must submit an initial notification listing the requirements of 40 CFR 63, Subpart JJJJ no later than 1 year before the compliance date for existing affected sources (i.e.: No later than December 5, 2004). [40 CFR 63.3400(b)(1)]

b. The initial notification must comply with the requirements contained in 40 CFR 63.9(b). [40 CFR 63.3400(b)(3)] Additionally, the permittee must specify which emission standard option specified in 40 CFR 63.3320(b)(1), (2), (3), or (4) will be met, and the associated requirements from 40 CFR 63.3360 and 63.3370 for showing compliance. The permittee shall submit the information using DEP7007 series forms requesting a Title V permit revision.

c. The permittee must comply with the requirements of 40 CFR 63, Subpart JJJJ no later than December 5, 2005. [40 CFR 63.3330(a)]

d. The permittee must complete any performance tests required in 40 CFR 63.3360 within the time limits specified in 40 CFR 63.7(a)(2) (i.e.: Within 180 days of the compliance date for such source). [40 CFR 63.3330(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02 (--) Boilers

(02) C.E. Water Tube Boiler

Description: Rating: 60 mmBtu/hr
Primary Fuel: Natural Gas. Secondary Fuel: No. 2 Fuel Oil.
Originally Constructed: 1957
Installed: 1974 (Based on mill start-up date)

(04) Honeycomb Through Dryer (Commonly referred to as "Through-Air Dryer" or "TAD")

Description: Rating: 27 mmBtu/hr
Primary Fuel: Natural Gas. Secondary Fuel: None.
Installed: 1985

(--) Reeco Thermal Oxidizer, Model E-45000

Description: Rating: 30 mmBtu/hr
Primary Fuel: Natural Gas. Secondary Fuel: None.
Installed: 1989

Control Equipment Description: None.

APPLICABLE REGULATIONS:
401 KAR 59:015, *New indirect heat exchangers*, applies to the boilers identified above.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to the Reeco Thermal Oxidizer.

1. **Operating Limitations:** Natural gas shall be the only type of fuel combusted in the Honeycomb Through Dryer and the Reeco Thermal Oxidizer.

   Compliance Demonstration Method:
   Compliance shall be demonstrated through the **Specific Monitoring** and **Recordkeeping Requirements**, below.

2. **Emission Limitations:**
   a. Particulate matter emissions shall not exceed the limits specified below for each boiler. [401 KAR 59:015, Section 4 (1)(c)]

Boiler	Emission Limit (lb/mmBtu)
C.E. Water Tube Boiler	0.367

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02 (--) Boilers (Continued)

Honeycomb Through Dryer	0.349
Reeco Thermal Oxidizer	0.314

b. Sulfur dioxide emissions shall not exceed the limits specified below for each boiler. [401 KAR 59:015, Section 5 (1)(c)]

Boiler	Emission Limit (lb/mmBtu)
C.E. Water Tube Boiler	1.257
Honeycomb Through Dryer	1.066
Reeco Thermal Oxidizer	0.935

c. The opacity of visible emissions shall not exceed 20 percent [401 KAR 59:015, Section 4 (2)] except as provided below:
   (1) Pursuant to 401 KAR 59:015, Section 4(2)(b), a maximum of 40% opacity is permissible for not more than 6 consecutive minutes in any 60 consecutive minute period during cleaning the fire box or blowing soot.
   (2) Pursuant to 401 KAR 59:015, Section 4(2)(c), the opacity standard does not apply during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
   (3) Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.

Compliance Demonstration Method:
Mass Emission Limits:

a. The boilers listed above shall be deemed in compliance with the applicable mass emission standards (lb/mmBtu) for particulate matter and sulfur dioxide while natural gas is the only fuel used.

b. Compliance with the particulate standard for the C.E. Water Tube Boiler while burning # 2 fuel oil shall be demonstrated by calculating emissions using fuel oil usage rates, U.S. EPA AP-42 emission factor, and boiler capacity information as follows:

   Particulate emissions (lb/mmBtu) from #2 fuel oil combustion = [(Monthly fuel oil consumption rate in 1000's of gallons x 2 lbs PM emissions per 1,000 gallons) / (Hours of boiler operation per month x 60 mmBtu/hr)]

c. Compliance with the allowable SO_2 standard for the C.E. Water Tube Boiler while burning #2 fuel oil shall be demonstrated by calculating emissions using fuel oil

02 (--) **Boilers** (Continued)

usage rates, U.S. EPA AP-42 emission factor, and boiler capacity information as follows:

SO_2 emissions (lb/mmBtu) from #2 fuel oil combustion = [(Monthly fuel oil consumption rate in 1000's of gallons x 142S lbs sulfur emissions per 1,000 gallons) / (Hours of boiler operation per month x 60 mmBtu/hr)]

Opacity Limit:

a. The boilers listed above shall be deemed in compliance with the applicable visible emission standard while natural gas is the only fuel used.

b. Compliance with the applicable visible emission standard for the C.E. Water Tube Boiler while burning #2 fuel oil shall be demonstrated through the following procedures:
   (1) Once per day during periods of #2 fuel oil combustion, the permittee shall survey the C.E. Water Tube Boiler for visible emissions and maintain a log of observations.
   (2) If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

3. **Testing Requirements:** Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**

a. The permittee shall monitor the amount and type of fuel burned on a daily basis at each boiler. [40 CFR 60.48c(g)]

b. When used at the C.E. Water Tube Boiler, the permittee shall also monitor the heat content and sulfur content of #2 fuel oil burned. The permittee may use the supplier certification to indicate heat content and sulfur content.

5. **Specific Recordkeeping Requirements:** The permittee shall keep records of the items listed in **4. Specific Monitoring Requirements**, above, and make them available to Division personnel upon request.

6. **Specific Reporting Requirements:** None.

7. **Specific Control Equipment Operating Conditions:** None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator

Description: Manufacturer: Joy Energy Systems, Inc.
Model: 1300B (Multiple Chamber Incinerator)
Burn Rate: 1000 lb/hr
Primary Chamber Rating: two 1.85 mmBtu/hr burners
Secondary Chamber Rating: 5.08 mmBtu/hr
Primary Fuel: Natural Gas. Secondary Fuel: None.
Installed: 1993

Control Equipment Description: None.

APPLICABLE REGULATIONS:
401 KAR 59:020, *New incinerators,* applies to the Joy Incinerator.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart DDDD, *Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999*, applies to the Joy Incinerator.

NON-APPLICABLE REGULATIONS:
40 CFR 60 Subpart E, *Standards of Performance for Incinerators*, does not apply to the Joy Incinerator because it is limited to a maximum loading capacity of 1000 lbs/hour.

1. Operating Limitations:

a. The Joy Incinerator shall have a nameplate installed in a conspicuous place on the unit giving the manufacturer's name, model number, rated capacity, and the types of waste material for which the unit is designed. [401 KAR 59:020, Section 5]

b. The maximum burn rate of the Joy Incinerator shall not exceed 1000 lbs/hr and 2304 t/yr. [Permit C-92-053]

c. The Joy Incinerator can not be operated unless a fully trained and qualified operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified Joy Incinerator operator may operate the Joy Incinerator directly or be the direct supervisor of one or more other plant personnel who operate the unit. [40 CFR 60.2635(a)]

d. Operator training and qualification must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs d.(1) through (3) below. [40 CFR 60.2635(c)]

(1) Training on the eleven subjects listed in paragraphs (1)(a) through (k) of this section.

(a) Environmental concerns, including types of emissions.

(b) Basic combustion principles, including products of combustion.

(c) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures.

(d) Combustion controls and monitoring.

03 (--) **Joy Incinerator** (Continued)

(e) Operation of air pollution control equipment and factors affecting performance (if applicable).
(f) Inspection and maintenance of the incinerator and air pollution control devices.
(g) Actions to correct malfunctions or conditions that may lead to malfunction.
(h) Bottom and fly ash characteristics and handling procedures.
(i) Applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards.
(j) Pollution prevention.
(k) Waste management practices.

(2) An examination designed and administered by the instructor.
(3) Written material covering the training course topics that can serve as reference material following completion of the course.

e. The operator-training course must be completed by the later of the two dates specified in paragraphs e.(1) through (2) of this section. [40 CFR 60.2640]
(1) The final compliance date (See the **Compliance Schedule 9.a.(3)**, below).
(2) Six months after an employee assumes responsibility for operating the Joy Incinerator or assumes responsibility for supervising the operation of the Joy Incinerator.

f. Operator qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under **Operating Limitation 1.d(2)**, above. [40 CFR 60.2645(b)]

g. To maintain qualification, operators must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs g.(1) through (5) of this section. [40 CFR 60.2650]
(1) Update of regulations.
(2) Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling.
(3) Inspection and maintenance.
(4) Responses to malfunctions or conditions that may lead to malfunction.
(5) Discussion of operating problems encountered by attendees.

h. To renew a lapsed operator qualification, follow one of the two methods specified in paragraphs h.(1) and (2) of this section. [40 CFR 60.2655]
(1) For a lapse of less than 3 years, the operator must complete a standard annual refresher course described in **Operating Limitation 1.g.**, above.
(2) For a lapse of 3 years or more, the operator must repeat the initial qualification requirements in **Operating Limitation 1.d.**, above.

i. If all qualified operators are temporarily not accessible (i.e., not at the facility and not able to be at the facility within 1 hour), the permittee must meet one of the two criteria specified in paragraphs i.(1) and (2) of this section, depending on the length of time that a qualified operator is not accessible. [40 CFR 60.2665]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

(1) When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the Joy Incinerator may be operated by other plant personnel familiar with the operation of the Joy Incinerator who have completed a review of the information in **Specific Recordkeeping Requirement 5.d.**
within the past 12 months. However, the period when all qualified operators were not accessible must be recorded, and included in the annual report as specified under the **Specific Reporting Requirement 6.e.** and **f.**, below.

(2) When all qualified operators are not accessible for 2 weeks or more, the permittee must take the two actions that are described in paragraphs (2)(a) and (b) of this section. [See **Specific Reporting Requirements 6.j. and k.**]

(a) Notify the Division of this deviation in writing within 10 days. In the notice, state what caused this deviation, what is being done to ensure that a qualified operator is accessible, and the anticipated time when a qualified operator will be accessible.

(b) Submit a status report to the Division every 4 weeks outlining what is being done to ensure that a qualified operator is accessible, stating the anticipated time when a qualified operator will be accessible, and requesting approval from the Division to continue operation of the Joy Incinerator. Submit the first status report 4 weeks after notifying the Division of the deviation under paragraph (2)(a) of this section. If the Division's response to your request to continue operation of the Joy Incinerator is disapproved, the Joy Incinerator may continue operation for 90 days, then must cease operation. Operation of the unit may resume after meeting the two requirements in paragraphs (2)(b)(i) and (ii) of this section.

(i) A qualified operator is accessible as required under **Operating Limitation 1.c.**, above.

(ii) Notify the Division that a qualified operator is accessible and that operations are being resumed.

j. The permittee must establish a program for reviewing the information listed in **Specific Recordkeeping Requirement 5.d.** with each incinerator operator. [40 CFR 60.2660(b)]

(1) The initial review of the information listed in **Specific Recordkeeping Requirement 5.d.** must be conducted by the later of the two dates specified in paragraphs (1)(a) through (b) of this section.

(a) The final compliance date (See the **Compliance Schedule 9.a.(3)**, below).

(b) Six months after being assigned to operate the Joy Incinerator.

(2) Subsequent annual reviews of the information listed in **Specific Recordkeeping Requirement 5.d.** must be conducted no later than 12 months following the previous review.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

k. Since a wet-scrubber is not used to control emissions, the permittee must petition the Division for specific Joy Incinerator operating limits to be established during the initial performance test, and they must be continuously monitored thereafter. The permittee must not conduct the initial performance test until after the petition has been approved by the Division. [40 CFR 60.2680]

l. The petition must include the five items listed in paragraphs l.(1) through (5) of this section. [40 CFR 60.2680(a) – (e)]
   (1) Identification of the specific parameters proposed to be used as additional operating limits.
   (2) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants.
   (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters.
   (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.
   (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

m. Specific operating limits for the Joy Incinerator must be established during the initial performance test on the date the initial performance test is required or completed (whichever is earlier). [40 CFR 60.2675(b)]

n. Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour rolling average values are used to determine compliance unless a different averaging period is established under **Operating Limitations 1.k. – 1.m.**, above. [60.2710(b)]

o. The operating limits apply at all times except during Joy Incinerator startups, shutdowns, malfunctions, or performance testing. Each malfunction must last no longer than 3 hours. [40 CFR 60.2685(a) and (b), and 60.2710(b)]

p. The solid wastes burned in the Joy Incinerator shall be the same types of waste used to establish operating limits during the performance test. [60.2710(c)]

Compliance Demonstration: See the **Recordkeeping Requirements**, below.

2. Emission Limitations:

a. No owner or operator of this facility shall cause to be discharged into the atmosphere any gases which contain particulate matter in excess of 0.23 g/dscm (0.1 gr/dscf) corrected to 12% carbon dioxide excluding the contribution of carbon dioxide from auxiliary fuel. [401 KAR 59:020, Section 3(2)(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

b. The opacity requirement from 401 KAR 59:020, Section 3(1) will be satisfied by the opacity requirement listed in the table associated with **Emission Limitation 2.c.**

c. The emission limitations specified in the table below must be met on the date the initial performance test is required or completed (whichever is earlier). [40 CFR 60.2670 and 40 CFR 60 Subpart DDDD, Table 2]

For the air pollutant:	The emission limitation is:	Using this averaging time:	And determining compliance using this method:
Cadmium	0.004 mg/dscf	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Carbon Monoxide	157 ppmdv	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Dioxins/furans (toxic equivalency basis)	0.41 ηg/dscf	3-run average (1 hour volume minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Hydrogen Chloride	62 ppmdv	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Lead	0.04 mg/dscf	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Mercury	0.47 mg/dscf	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Opacity	10 percent	6-minute averages	Performance test (Method 29 of Appendix A of 40 CFR 60)
Oxides of nitrogen	388 ppmdv	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Particulate matter	70 mg/dscf	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)
Sulfur dioxide	20 ppmdv	3-run average (1 hour volume minimum sample time per run)	Performance test (Method 29 of Appendix A of 40 CFR 60)

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

Compliance Demonstration: Use the results of performance tests to demonstrate compliance with the emission limitations. [40 CFR 60.2695 and 401 KAR 59:020 Section 6(1)] See the **Testing** and **Monitoring Requirements**, below.

3. Testing Requirements:

a. For **Emission Limitation 2.a.**:

(1) The reference methods as defined in Appendix A of 40 CFR 60, except as provided for in 401 KAR 50:045, shall be used to determine compliance with the standards prescribed in **Emissions Limitation 2.a.** above. [401 KAR 59:020 Section 6(1)]

(2) The sampling time for each run shall be at least 60 minutes and the minimum volume shall be 0.85 dscm (30 dscf) except that shorter sampling times or smaller sample volumes may be approved by the Division. [401 KAR 59:020 Section 6(2)]

b. For the **Emission Limitation 2.c.** and the associated table:

(1) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations. [40 CFR 60.2690(a)]

(2) Document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned and the types of waste burned during the performance test (see **Specific Recordkeeping Requirement 5.d.(10)** and **5.f.(2)(a)**, below). [40 CFR 60.2690(b)]

(3) All performance tests must be conducted using the minimum run duration specified in the table above. [40 CFR 60.2690(c)]

(4) Method 1 of appendix A of 40 CFR 60 must be used to select the sampling location and number of traverse points. [40 CFR 60.2690(d)]

(5) Method 3A or 3B of appendix A of 40 CFR 60 must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B must be used simultaneously with each method. [40 CFR 60.2690(e)]

(6) All pollutant concentrations from **Emission Limitation 2.c.**, except for opacity, must be adjusted to 7 percent oxygen using the following equation: [40 CFR 60.2690(f)]

$C_{adj} = C_{meas}$ (20.9-7)/(20.9-%O2), where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;
C_{meas} = pollutant concentration measured on a dry basis;
(20.9-7) = 20.9 percent oxygen-7 percent oxygen (defined oxygen correction basis);
20.9 = oxygen concentration in air, percent; and
%O2 = oxygen concentration measured on a dry basis, percent.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

(7) Determine dioxins/furans toxic equivalency by following the procedures in

paragraphs (7)(a) through (c) of this section. [40 CFR 60.2690(g)(1) – (3) and 40 CFR 60 Table 4]

(a) Measure the concentration of each dioxin/furan tetra- through octa-congener emitted using EPA Method 23.

(b) For each dioxin/furan congener measured in accordance with paragraph (7)(a) of this section, multiply the congener concentration by its corresponding toxic equivalency factor specified in the table below.

(c) Sum the products calculated in accordance with paragraph (7)(b) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

Dioxin/furan congener	**Toxic equivalency factor**
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

c. Conduct an initial performance test, no later than 180 days after your final compliance date and as required by 40 CFR 60.8, to determine compliance with **Emission Limitation 2.c.**, and to establish operating limits using the procedures in **Operating Limitations 1.k. – 1.m.** The initial performance test must be conducted using the test methods listed in the table associated with **Emission Limitation 2.c.**, and the procedures in **Testing Requirement 3.a.** and **3.b.**. [40 CFR 60.2700 and 60.2705]

d. Conduct annual performance tests for particulate matter, hydrogen chloride, and opacity within 12 months following the initial performance test. Conduct subsequent

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

annual performance tests within 12 months following the previous one. [40 CFR

60.2715]

e. Conduct annual performance tests for particulate matter, hydrogen chloride, and opacity as required under 40 CFR 60.8 to determine compliance with the emission limitations. The annual performance test must be conducted using the test methods listed in the table associated with **Emission Limitation 2.c.**, above, and the procedures in **Testing Requirement 3.a.** and **3.b.**. [40 CFR 60.2710(a)]

f. Performance tests can be conducted less often for a given pollutant if test data for at least 3 years is present, and all performance tests for the pollutant (particulate matter, hydrogen chloride, or opacity) over 3 consecutive years show that the Joy Incinerator complies with the emission limitation. In this case, a performance test for that pollutant does not need to be conducted for the next 2 years. Conduct a performance test during the third year and no more than 36 months following the previous performance test. If the Joy Incinerator continues to meet the emission limitation for particulate matter, hydrogen chloride, or opacity, performance tests for these pollutants may be conducted every third year, but each test must be within 36 months of the previous performance test. [40 CFR 60.2720(a) - (b)]

g. If a performance test shows a deviation from an emission limitation for particulate matter, hydrogen chloride, or opacity, revert to annual performance tests for that pollutant until all performance tests over a 3-year period show compliance. [40 CFR 60.2720(c)]

h. A repeat performance test may be conducted at any time to establish new values for the operating limits. The Division may request a repeat performance test at any time. [40 CFR 60.2725(a)]

i. Repeat the performance test if the Joy Incinerator feed stream is different than the feed streams used during any performance test used to demonstrate compliance. [40 CFR 60.2725(b)]

4. Specific Monitoring Requirements:

a. Continuously monitor the operating parameters established under **Operating Limitations 1.k. – 1.m.** [40 CFR 60.2710(b)]

b. Install, calibrate (to the manufacturers' specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established under **Operating Limitations 1.k. – 1.m.** [40 CFR 60.2730(c)]

c. Except for monitoring malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), conduct all monitoring at all times the Joy Incinerator is operating. [40 CFR 60.2735(a)]

d. Do not use data recorded during malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart,

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

including data averages and calculations. Use all the data collected during all other

periods in assessing compliance with the operating limits. [40 CFR 60.2735(b)]

5. Specific Recordkeeping Requirements:

a. Maintain the information required by **Specific Recordkeeping Requirement 5.d.** and the training records required by **Specific Recordkeeping Requirement 5.e.** in a manner that they can be readily accessed and are suitable for inspection upon request. [40 CFR 60.2660(a)]

b. All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Division. [40 CFR 60.2745]

c. All records must be maintained for a period of at least 5 years. [40 CFR 60.2740]

d. Documentation must be available at the facility and readily accessible for all Joy Incinerator operators that addresses the ten topics described in paragraphs d.(1) through (10) of this section. [40 CFR 60.2660(a)]

(1) Summary of the applicable standards under this subpart.
(2) Procedures for receiving, handling, and charging waste.
(3) Incinerator startup, shutdown, and malfunction procedures.
(4) Procedures for maintaining proper combustion air supply levels.
(5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart.
(6) Monitoring procedures for demonstrating compliance with the incinerator operating limits.
(7) Reporting and recordkeeping procedures.
(8) The Waste Management Plan required under paragraph 9, Compliance Schedule, below.
(9) Procedures for handling ash.
(10) A list of the wastes burned during the performance test.

e. Maintain the information specified in paragraphs e.(1) through (3) of this section. [40 CFR 60.2660(c)]

(1) Records showing the names of Joy Incinerator operators who have completed review of the information in **Specific Recordkeeping Requirement 5.d.** as required by **Operating Limitation 1.j.**, including the date of the initial review and all subsequent annual reviews.

(2) Records showing the names of the Joy Incinerator operators who have completed the operator training required by **Operating Limitation 1.d.**, met the criteria for qualification required by **Operating Limitation 1.f.**, and maintained or renewed their qualification required **by Operating Limitation 1.g.** and **h.**. Records must include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

(3) For each qualified operator, the telephone and/or pager number at which they can be reached during operating hours.

f. Maintain the items specified in paragraphs f.(1) through (9) of this section. [40 CFR 60.2740(a) – (f), (j), (k), and (m)]
   (1) Calendar date of each record.
   (2) Records of the data described in paragraphs (2)(a) through (b) of this section:
      (a) The Joy Incinerator charge dates, times, weights, and hourly charge rates.
      (b) The data collected for all operating parameters used to determine compliance with the operating limits.
   (3) Identification of calendar dates and times for which monitoring systems used to monitor operating limits were inoperative, inactive, malfunctioning, or out of control (except for downtime associated with zero and span and other routine calibration checks). Identify the operating parameters not measured, the duration, reasons for not obtaining the data, and a description of corrective actions taken.
   (4) Identification of calendar dates, times, and duration of malfunctions, and a description of the malfunction and the corrective action taken.
   (5) Identification of calendar dates and times for which data shows a deviation from operating limits established pursuant to **Operating Limitations 1.k. – 1.m.** with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
   (6) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.
   (7) Records of calibration of any monitoring devices as required under **Specific Monitoring Requirement 4.b.**.
   (8) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
   (9) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned.

6. Specific Reporting Requirements:

a. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office.

b. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

c. Results of the most recent performance test shall be reported to the Division within 45 days after completion of the fieldwork as specified in condition **F.11.** of this permit.

d. The performance test results submittal must be signed by the facilities manager and include the information in paragraph d.(1) and (2) of this section. [40 CFR 60.2760(a) and (b)]
   (1) The complete test report for the performance test.
   (2) The values for the site-specific operating limits established in **Operating Limitations 1.k. – 1.m.** and **Testing Requirement 3.c.**

e. Semi-annual summary reports of required monitoring shall be submitted as specified in conditions **F.5.** and **F.6.** of this permit.

f. The semi-annual reports required by **Specific Reporting Requirement 6.e.** must include the ten items listed in paragraphs f..(1) through (10) of this section. [40 CFR 60.2770(a) – (j)]
   (1) Company name and address.
   (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
   (3) Date of report, and beginning and ending dates of the reporting period.
   (4) The values for the operating limits established pursuant to **Operating Limitations 1.k. – 1.m.**
   (5) If no deviation from any emission limitation or operating limit has occurred, a statement that there was no deviation from the emission limitations or operating limits during the reporting period, and that no monitoring system used to determine compliance with the operating limits was inoperative, inactive, malfunctioning or out of control.
   (6) The highest recorded 3-hour average and the lowest recorded 3- hour average, as applicable, for each operating parameter recorded for the reporting period.
   (7) Information recorded under **Specific Recordkeeping Requirement 5.f.(3) – (5)** for the reporting period.
   (8) If a performance test was conducted during the reporting period, the results of that test.
   (9) If you met the requirements of **Testing Requirement 3.f.**, and did not conduct a performance test during the reporting period, you must state that you met the requirements of **Testing Requirement 3.f.**, and, therefore, you were not required to conduct a performance test during the reporting period.
   (10) Documentation of periods when all qualified Joy Incinerator operators were unavailable for more than 8 hours, but less than 2 weeks.

g. Submit a deviation report if any recorded 3-hour average parameter level is above the maximum operating limit or below the minimum operating limit established under **Operating Limitations 1.k. – 1.m.**, or if a performance test was conducted that deviated from any emission limitation. [40 CFR 60.2775(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

h. In accordance with section **F. 8.** of this permit, the deviation report must be submitted within thirty days following when the exceedance is determined to the Division for Air Quality's Owensboro Regional Office.

i. In each deviation report required under **Specific Reporting Requirement 6.g.**, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, include the six items described in paragraphs i.(1) through (6) of this section. [40 CFR 60.2780(a) – (f)]
   (1) The calendar dates and times your unit deviated from the emission limitations or operating limit requirements.
   (2) The averaged and recorded data for those dates.
   (3) Duration and causes of each deviation from the emission limitations or operating limits and your corrective actions.
   (4) A copy of the operating limit monitoring data during each deviation and any test report that documents the emission levels.
   (5) The dates, times, number, duration, and causes for monitoring downtime incidents (other than downtime associated with zero, span, and other routine calibration checks).
   (6) Whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.

j. If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in paragraphs j.(1) and (2) of this section. [40 CFR 60.2785(a)(1) – (2)]
   (1) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (1)(a) through (c) of this section.
      (a) A statement of what caused the deviation.
      (b) A description of what is being done to ensure that a qualified operator is accessible.
      (c) The anticipated time when a qualified operator will be accessible.
   (2) Submit a status report to the Division every 4 weeks that includes the three items in paragraphs (2)(a) through (c) of this section.
      (a) A description of what is being done to ensure that a qualified operator is accessible.
      (b) The anticipated time when a qualified operator will be accessible.
      (c) A request for approval from the Division to continue operation of the Joy Incinerator.

k. If your unit was shut down by the Division, under the provisions of **Operating Limitation 1.i.(2)(b)**, due to a failure to provide an accessible qualified operator, you must notify the Division that you are resuming operation once a qualified operator is accessible.

l. Submit notifications as provided by 40 CFR 60.7. [40 CFR 60.2795]

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) Joy Incinerator (Continued)

8. Alternate Operating Scenarios: None.

9. Compliance Schedule:

a. The permittee is required to meet the increments of progress outlined in paragraph

a.(1) through (3) of this section. [40 CFR 60.2575(a) – (b), 60.2580, 60.2625, 60.2775 and Table 1]

(1) Submit a waste management plan no later than September 18, 2004.

(2) Submit a final control plan no later than September 18, 2004.

(3) Achieve final compliance no later than March 18, 2005 (40 CFR 60 Subpart DDDD was incorporated by reference into 401 KAR 60:005 on March 18, 2002).

b. The permittee must notify the Division when each increment of progress is met. Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment, and must include the three items specified in paragraphs b.(1) through (3) of this section. [40 CFR 60.2585(a) – (c), and 60.2590]

(1) Notification that the increment of progress has been achieved.

(2) Any items required to be submitted with each increment of progress. See **Compliance Schedule 9.d.** through **f.**, below.

(3) Signature of the owner or operator of the Joy Incinerator.

c. If an increment of progress is not met, submit a notification to the Division postmarked within 10 business days after the date for that increment of progress specified in **Compliance Schedule 9.a.**. Inform the Division that the increment was not met, and continue to submit reports each subsequent calendar month until the increment of progress is met. [40 CFR 60.2595]

d. For the waste management plan increment of progress, prepare and submit a waste management plan based on the guidance in paragraphs d.(1) and (2) of this section. [40 CFR 60.2620 and 60.2630]

(1) A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

(2) A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures, and the source must implement those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have.

e. For the control plan increment of progress, satisfy the two requirements specified in paragraphs e.(1) and (2) of this section. [40 CFR 60.2600]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--) **Joy Incinerator** (Continued)

(1) The final control plan must include the five items described in paragraphs (1)(a) through (e) of this section.

(a) A description of the devices for air pollution control and process changes that you will use to comply with the emission limitations and other requirements of this subpart.

(b) The type(s) of waste to be burned.
(c) The maximum design waste burning capacity.
(d) The anticipated maximum charge rate.
(e) The petition for site-specific operating limits under **Operating Limitation 1.k.**.

(2) Maintain an onsite copy of the final control plan.

f. For the final compliance increment of progress, complete all operational and processing changes as specified in the final control plan. [40 CFR 60.2605]

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description	Generally Applicable Regulation
1. Direct Fired Gas Space Heater (4.5 mmBtu/hr) Installed 1974.	None.
2. Direct Fired Gas Space Heater (5.0 mmBtu/hr) Installed 1974.	None.
3. Direct Fired Gas Space Heater (7.5 mmBtu/hr) Installed 1974.	None.
4. Direct Fired Gas Space Heater (5.5 mmBtu/hr) Installed 2002.	None.
5. AFMUST01 Underground Storage Tank (KY-16) 19,980 gal.	40 CFR 60.116b(a), (b)
6. AFMUST02 Underground Storage Tank (KY-17) 19,980 gal.	40 CFR 60.116b(a), (b)
7. AFMUST03 Underground Storage Tank (KY-18) 19,980 gal.	40 CFR 60.116b(a), (b)
8. AFMUST04 Underground Storage Tank (KY-19) 19,980 gal.	40 CFR 60.116b(a), (b)
9. AFMUST05 Underground Storage Tank (KY-20) 19,980 gal.	40 CFR 60.116b(a), (b)
10. AFMUST06 Underground Storage Tank (KY-21) 19,980 gal.	40 CFR 60.116b(a), (b)
11. AFMUST07 Underground Storage Tank (KY-22) 19,980 gal.	40 CFR 60.116b(a), (b)
12. AFMUST08 Underground Storage Tank (KY-23) 19,980 gal.	40 CFR 60.116b(a), (b)
13. AFMAST01 Resin Storage Tank 12,100 gal.	None.
14. AFMAST02 Resin Storage Tank 8,850 gal.	None.
15. AFMAST03 Resin Storage Tank 7,000 gal.	None.
16. Cyclones (2) used as control devices at the paper cutting station.	401 KAR 59:010
17. Hydrapulper Cyclones (2) used as material handling devices.	401 KAR 59:010
18. Electric Ovens for Research Facility	None.
19. Lamination Process	None.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter, SO_2, VOC, and potentially hazardous matter or toxic substance emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Drive W., Suite 700
Owensboro, KY 42303-2191

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    (a) Applicable requirements that are included and specifically identified in the permit and
    (b) Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
No construction authorized by this permit.

(e) Acid Rain Program Requirements
No Acid Rain authorized by this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply

with the required practices contained in 40 CFR 82.156.

SECTION G - GENERAL PROVISIONS (CONTINUED)

b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

Not applicable.

SECTION I - COMPLIANCE SCHEDULE

See the compliance schedule requirements for the Paper Coating Operations (EP 01) and the Joy Incinerator (EP 03) under Section B of the permit.